

REMARKS

Claims 1-17 are pending in the application, claims 1-3 and 5-17 are rejected, and claim 4 is objected to. Claims 1, 4-7, 15, and 17 have been amended, and claim 13 has been cancelled.

I. ALLOWABLE SUBJECT MATTER

Examiner has indicated that claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. To this end, claim 4 has been amended to include the limitations contained in claims 1-4, and thus claim 4 is now believed allowable. Dependent claims 5 and 6 have been amended to depend from amended independent claim 4 and are believed allowable therewith.

II. CLAIM REJECTION UNDER 35 USC § 102

Examiner rejects claims 1-3 and 6 under 35 USC § 102(e) as being anticipated by Liang et al. Examiner states that with respect to claim 1, Liang discloses an image sensing device comprising an optical sensor (16) having an output for providing pixel signals generated in response to light projected onto regions (rows) of the optical sensor, and an amplifier (46) having a first input (20, 28) coupled for receiving the pixel signals, a first output (29) for providing an imaging signal, and a control input (45) coupled for receiving control data representing a predetermined region characterization (previously detected maximum voltage) to amplify the pixel signals to different gains when the pixel signals are generated in different regions (rows) of the optical sensor. Applicants' independent claim 1 has been amended to recite that the control input is coupled for receiving control data representative of signal

variations from each respective region to amplify the pixel signals to different gains when the pixel signals are generated in different regions of the optical sensor. In this manner, Applicants' amended independent claim 1 has now been further limited so as to clearly distinguish over the apparatus taught by Laing et al. since Laing et al. does not teach or suggest that the control data is representative of signal variations from each respective region. Therefore, it is respectfully submitted that Applicants' independent claim 1 now distinguishes over the Laing et al. reference. Dependent claims 2 and 3 are believed to properly depend, either directly or indirectly, from Applicant's amended independent claim 1 and are believed allowable therewith.

As stated previously, Applicants' amended dependent claim 6 is now believed to properly depend from Applicants' amended independent claim 4 and is believed allowable.

III. CLAIM REJECTION UNDER 35 USC § 103

Examiner rejects claims 7-17 under 35 USC § 103(a) as being unpatentable over Liang et al. in view of Applicants' conceded prior art. Applicants' independent claim 7 has been amended to recite the additional steps of storing the control data in a memory circuit having an address input coupled for receiving the pixel address and an output coupled to the control input of the amplifier and retrieving the control data with address data. It is respectfully submitted that these features are not shown or suggested in Liang et al. taken singly or in combination with Applicants' conceded prior art. Therefore, it is respectfully submitted that Applicant's amended independent claim 7 is allowable. Applicant's dependent claims 8-12 and 14 are believed to properly depend, either directly or indirectly, from Applicants' amended independent claim 7 and are believed allowable therewith. Claim 13 has been cancelled.

Applicants' independent claim 15 has been amended to recite the step of setting a gain of an amplifier having a control input with first control data representing a known variation of signal from a predetermined region for amplifying the first pixel signal, and altering the gain of the amplifier with second control data representing a known variation of signal from a second predetermined region for amplifying the second pixel signal to equalize the responses of the first and second regions of the optical sensor to the light. The newly recited features of setting a gain of an amplifier having a control input with first control data representing a known variation of signal from a first predetermined region and altering a gain of the amplifier with second control data representing a known variation of signal from a second predetermined region is not shown or suggested by the Liang et al. reference itself or when taken in combination with Applicants' prior art. Therefore, Applicants' amended independent claim 15 and dependent claim 16, which is believed to properly depend from Applicants' amended independent claim 15, are now believed to distinguish over the cited art and are therefore believed allowable.

Applicants' independent claim 17 has been amended to recite that each of the plurality of regions has a corresponding control data representative of signal variations from respective ones of the plurality of regions and that the amplifier has a control input coupled for receiving the corresponding control data to amplify the pixel signals to different gains according to each of their corresponding signal variations. It is respectfully submitted that these features are not shown or suggested in the Liang et al. reference or Applicants' prior art and therefore Applicants' amended independent claim 17 is believed allowable.

IV. CONCLUSION

It is respectfully submitted that the above-identified application, as amended, is now in condition for allowance and such allowance is therefore earnestly requested by the Applicants.

Should the Examiner have any questions or wish to further discuss this application, Applicants request that the Examiner contact Applicants' attorneys at (602) 952-4399.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge deposit Account No. 13-4771 for any fee which may be due.

Respectfully submitted,



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Dated 11/18/02